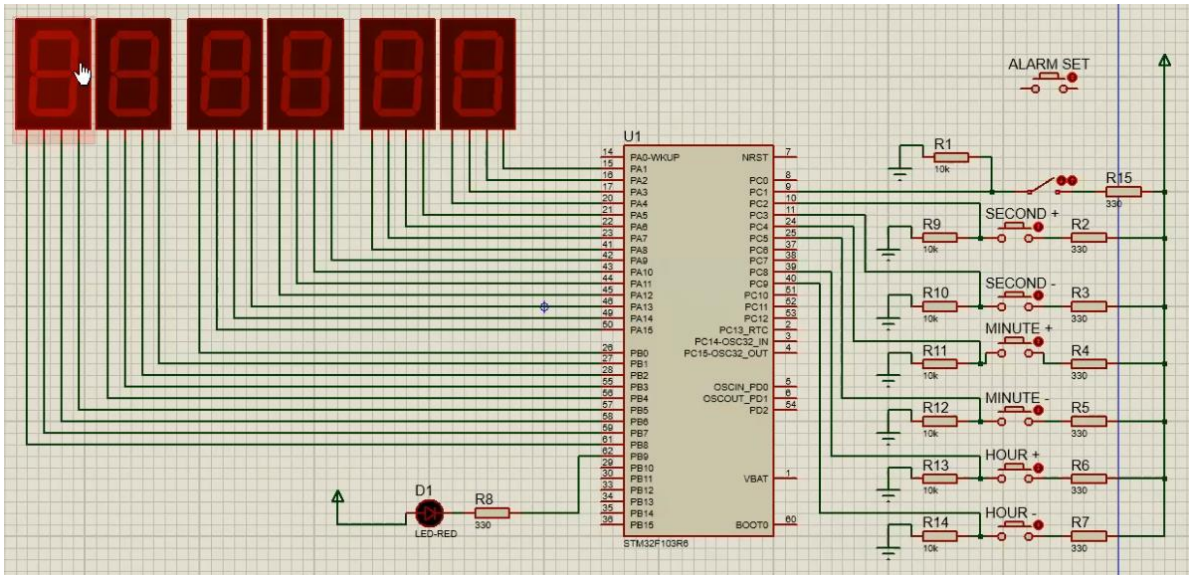
EE304 Alarm Clock Assignment (Midterm1)

v1

Due Date: 10.05.2020, 23:59



In this assignment you are expected to implement an alarm clock using RTC module of STM32Fxxx. An example video showing implementation is provided on Canvas.

Implementation requirements:

- Your project should show both alarm time and current time on 6 7 segment LCDs (you may prefer regular LEDs on physical boards). Switching operation between the two modes should be triggered via a switch whose state is monitored with an external interrupt.
- Hour, minute and second information of alarm time should be changeable using external buttons (2xbuttons (up, down) for each). Again, the status of these buttons should be monitored via external interrupts.
- The alarm output should be demonstrated using an LED or a buzzer.
- Usage of the buzzer will be counted as a bonus.

Submission requirements:

- Your submission file should have your Proteus project file(s), your uVision project file(s), your cubeMx project file(s) and a video file with your explanation or a URL to that video on a cloud platform.